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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,231	04/03/2001	Kazumitsu Kushida	0505-0810P	9119

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EXAMINER

HARRINGTON, ALICIA M

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,231

Applicant(s)

KUSHIDA ET AL.

Examiner

Alicia M Harrington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 4/3/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5&6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The Examiner had considered the information disclosure statements filed on 4/3/01 and 9/6/01.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Rasaat (EP 0338703).

Regarding claim 1, Rasaat discloses a display for a motorcycle which provides velocity (col. 2, lines 40-50 and vol. 5, lines 40-45) information to the driver that is projected on the screen of the motorcycle in front of a riding position of the driver, where the visual field of the driver is divided into a central field and peripheral field on the screen and the image is located in the peripheral field (see col. 3, lines 30-52).

Regarding claim 2, Rasaat discloses the image is above the central field (col. 3, lines 47-52).

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Regarding claim 3, the image is a linear pattern (see figure 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat, as applied above in claim 1, in view of Hennessy et al (US 6,014,117).

Regarding claim 4, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat fails to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extending from a point in the central field to both ends of the image is at least 20 degrees. However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col.1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, as taught by Hennessy.

Regarding claim 5, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat fails to specifically disclose the width of the image the horizontal direction is

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determined the angle formed between two lines extending from an uppermost and lowermost point in the central field to both ends of the image is at least greater than 20 degrees. However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view at angle of greater than 20 degrees. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, and reduce the cognitive and visual demands of the user, as taught by Hennessy.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat, as applied above in claim 1, in view of Lu (US 4,998,976)

Regarding claim 6, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display. Although, it is well known in the art, as taught by Lu. In the same field of endeavor, Lu discloses a display unit for motorcycles where a projection display (see figure 9 and 10) is incorporated to project an image on the windshield or helmet of user. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, as taught by Lu, to provide a projection display device to provide information in the viewer line of sight, as taught by Lu.

Regarding claim 7, as discussed above in claim 6, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources. Lu discloses using vacuum fluorescent

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display as the projection display apparatus. And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 8, as discussed above in claim 6, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources and other claimed features. Although, Lu disclose using vacuum fluorescent display as the projection display apparatus where the projector is on a substrate in case with a lens for covering a portion of the case (see figure 10 and col. 15-35). And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat in view of Lu (US 4,998,976), as applied above in claim 8, further in view of Hennessy et al (US 6,014,117).

Regarding claim 9, as discussed above, Rasaat and Lu disclose a motorcycle with projection system. , Rasaat further discloses the image is 15 degrees from the center point. However, Rasaat and Lu fail to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extending from an uppermost and lowermost point in the central field to both ends of the image is at least greater than 20 degrees. Although, Hennessy teaches that a display system that conveys vehicle guidance information is

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generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view at angle of greater than 20 degrees. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, and reduce the cognitive and visual demands of the user, as taught by Hennessy.

Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat in view of Lu (US 4,998,976)

Regarding claim 10, Rasaat discloses a display for a motorcycle which provides velocity (col. 2, lines 40-50 and vol. 5, lines 40-45) information to the driver that is projected on the screen of the motorcycle in front of a riding position of the driver, where the visual field of the driver is divided into a central field and peripheral field on the screen and the image is located in the peripheral field (see col. 3, lines 30-52). Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display. Although, it is well known in the art, as taught by Lu. In the same field of endeavor, Lu discloses a display unit for motorcycles where a projection display (see figure 9 and 10) is incorporated to project an image on the windshield or helmet of user. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, as taught by Lu, to provide a projection display device to provide information in the viewer line of sight, as taught by Lu.

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Further, Rasaat discloses the display information is above the central position. And the information is fifteen degrees from the center point. However, Rasaat fails to specifically disclose the view is approximately six degrees in the vertical direction as defined by 90 percent of all drivers riding posture on the motorcycle. Since Rasaat and Lu disclose the claimed invention except for field of view defined as six degrees in the vertical direction, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide this feature, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re aller, 105 USPQ 233.

Regarding claim 11, as discussed above in claim 10, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources. Lu discloses using vacuum fluorescent display as the projection display apparatus. And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 12, as discussed above in claim 10, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources and other claimed features. Although, Lu disclose using vacuum fluorescent display as the projection display apparatus where the projector is on a substrate in case with a lens for covering a portion of the case (see figure 10 and col. 15-35). And the Examiner takes official notice that a projector comprising a plurality of light

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sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 13, Rasaat discloses the image is above the central field (col. 3, lines 47-52).

Regarding claim 14, the image is a linear pattern (see figure 5).

Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasaat in view of Lu, as applied above in claim 10, further in view of Hennessy et al (US 6,014,117).

Regarding claim 15, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat and Lu fail to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extended from a point in the central field to both ends of the image is at least 20 degrees. However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat and Lu, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, as taught by Hennessy.

Regarding claim 16, Rasaat discloses the image is 15 degrees from the center point. However, Rasaat and Lu fails to specifically disclose the width of the image the horizontal direction is determined the angle formed between two lines extending from an uppermost and

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lowermost point in the central field to both ends of the image is at least greater than 20 degrees.

However, Hennessy teaches that display system with convey vehicle guidance information is generally displayed within 30 degrees of vision of the central field of view of the user (col. 1, lines 60-67 and col. 3, lines 38-50). And Hennessy further illustrates an embodiment where information can be displayed in peripheral field of view at angle of greater than 20 degrees.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rasaat, such that the angle of the two lines extending from a point in the central region be at least 20 to prevent eye strain, and reduce the cognitive and visual demands of the user, as taught by Hennessy.

Regarding claim 17-18, as discussed above in claim 16, Rasaat has an electronic display for providing information to the user. However, Rasaat fails to specifically disclose the display is a projection display comprises a plurality of light sources and other claimed features. Although, Lu disclose using vacuum fluorescent display as the projection display apparatus where the projector is on a substrate in case with a lens for covering a portion of the case (see figure 10 and col. 15-35). And the Examiner takes official notice that a projector comprising a plurality of light sources is notoriously well known in the art of projection systems. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a projector as claimed, to provide a clear and bright image.

Regarding claim 19, Rasaat discloses the image is above the central field (col. 3, lines 47-52; figure 5).

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohshima et al (US 4,925,272) discloses a indication display unit for vehicles; and

Wood et al (WO 89/03059) discloses an automobile head up display system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M Harrington whose telephone number is 703 308 9295.

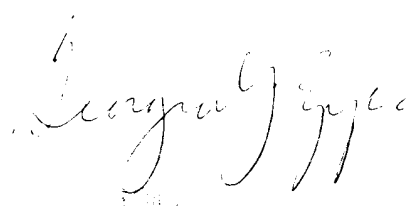
The examiner can normally be reached on Monday - Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703 308 4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 7724 for regular communications and 703 308 7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

Alicia M Harrington
Examiner
Art Unit 2873


AMH
June 17, 2002


Georgia Epps
Supervisor
Art Unit 2873